

## PATENT ABSTRACTS OF JAPAN

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## (54) ANTENNA SYSTEM

## (57) Abstract:

PROBLEM TO BE SOLVED: To provide an antenna system that is resonated for a plurality of frequency bands and used in common to a plurality of systems.

SOLUTION: The antenna system is resonance with a plurality of frequencies or provided with a linear feeding element 1 having length is L1 and a linear loop-back element 2 placed close to the feeding element 1 whose one end is short circuited to the feeding element 1 and whose length is L2, the difference (L1-L2) of the length between the feeding element 1 and the loop-back element 2 is set to be in resonance with higher frequencies and the length L1 of the feeding element 1 is set, in resonance with lower frequencies in cooperation with the loop-back element 2. Multi-resonance at a plurality of frequencies is attained, and the antenna is used in common for radio equipments in a plurality of systems.

